

Duncan Creek Wilderness Study Area

1. The Study Area -- 10,005 acres

The Duncan Creek Canyon WSA (ID-111-7B) is located in Owyhee County about 75 miles southeast of Boise, Idaho. The WSA includes 10,005 acres of BLM land and one state inholding of 640 acres (see Table 1).

The WSA is bounded on the east by a maintained dirt road, while most of the remainder of the WSA is bordered by primitive dirt roads. The WSA is dominated by more than ten miles of narrow, meandering, sheer-walled 500-foot deep canyons surrounded by a sagebrush- and grass-covered rolling plateau. Canyon bottoms are covered by riparian vegetation. More than 60 percent of the plateau is covered with near-pristine sagebrush steppe vegetation.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Management Framework Plan (MFP) for the Bruneau Resource Area finalized in March 1983. The recommendation for wilderness generated through the planning process was evaluated in the Jacks Creek Wilderness Environmental Impact Statement filed in July 1989. Four alternatives were analyzed in the EIS: a partial wilderness alternative where 8,760 acres would be designated as wilderness and 1,245 acres released for nonwilderness uses, which is the recommendation of this report; no wilderness and all wilderness alternatives; and a partial wilderness alternative where 9,445 acres would be designated as wilderness and 560 acres would be released for uses other than wilderness.

2. Recommendation and Rationale

**8,760 acres recommended for
wilderness**

**1,245 acres recommended for
nonwilderness**

The recommendation for the Duncan Creek WSA is to designate 8,760 acres as wilderness and release 1,245 acres for nonwilderness uses. The environmentally preferable alternative is the all wilderness alternative. It would cause the least change from the natural environment over the long term. The recommendation would use all practical means to avoid or minimize adverse environmental impacts.

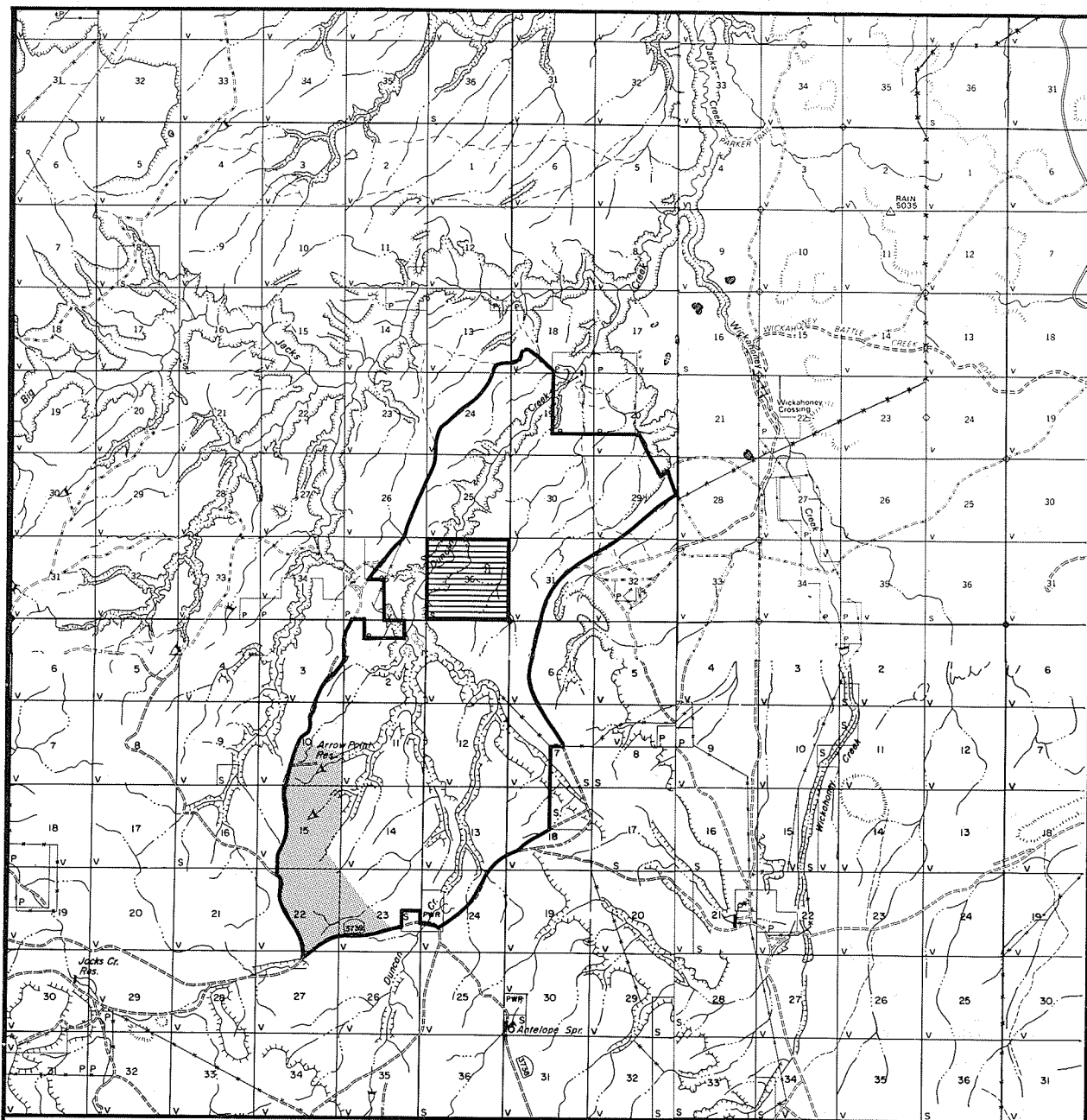
The 8,760 acres of federal land recommended for wilderness designation are shown as the nonshaded area on the Duncan Creek Proposal map. The recommendation for wilderness would further apply to a 640 acre inholding when acquired through exchange with the State of Idaho, and to about 300 acres of a 640 acre parcel of private land adjacent to the northern boundary of the WSA if acquired through exchange from a willing owner. Appendix I lists all inholdings within the area recommended for wilderness and provides additional information on acquisition of these lands.

The 8,760 acres recommended for wilderness would enhance the National Wilderness Preservation System through the addition of more than ten miles of spectacularly scenic canyons and surrounding plateau within 75 miles of Boise, Idaho. The area offers outstanding opportunities for primitive recreation and solitude within a natural setting. The area includes 4,500 acres of California bighorn sheep habitat. Although designation of the area as wilderness would not add a new ecosystem to the wilderness system, it would add 5,900 acres of sagebrush- and grass-covered plateau in good to excellent ecological condition.

The area recommended for wilderness is of low mineral resource potential and contains no mining claims or leases. With the acquisition of a 640 acre state inholding, the area can be managed in the long term to protect and maintain its wilderness characteristics. Wilderness designation would provide long-term protection to California bighorn sheep habitat and to a scenic area with outstanding wilderness values.




The 1,245 acres of BLM land not recommended for wilderness are shown as the shaded area on the Duncan Creek Proposal map. The area contains two small livestock water developments and 2.5 miles of primitive vehicle routes. The area is recommended for nonwilderness uses because of conflicts with livestock grazing, such as the proposed construction of a livestock water pipeline. If the 1,245 acres are excluded, the wilderness could be managed as a pristine area with no human-made features except an abandoned fence.

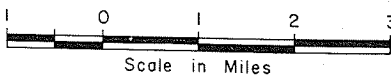
While the area contained the wilderness values necessary for study, they are not considered to be of a quality to merit inclusion in the National Wilderness Preservation System. The area generally appears natural but there are several site-specific signs of man which impact naturalness locally. Solitude opportunities available in the area are similar to those afforded by thousands of acres of land adjacent to the area.



R. 3 E. | R. 4 E.

R. 4 E. | R. 5 E.

- | | |
|---|--|
|  RECOMMENDED FOR WILDERNESS |  SPLIT ESTATE |
|  RECOMMENDED FOR NONWILDERNESS |  STATE |
|  LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS |  PRIVATE |



ID-111-7B
DUNCAN CREEK
PROPOSAL

FEBRUARY 1989

T. 9 S.
T. 10 S.

T. 10 S.
T. 11 S.

**Table 1 -- Land Status and Acreage Summary of the Study Area
DUNCAN CREEK WSA**

Within Wilderness Study Area

BLM (surface and subsurface)	10,005
Split Estate (BLM surface only)	0
Inholdings (state, private)	640
Total	10,645

Within the Recommended Wilderness Boundary

BLM (within WSA)	8,760
BLM (outside WSA)	0
Split Estate (within WSA)	0
Split Estate (outside WSA)	0
Total BLM Land Recommended for Wilderness	8,760
Inholdings (state, private) ¹	940
State land (outside WSA)	

Within the Area Not Recommended for Wilderness

BLM	1,245
Split Estate	0
Total BLM Land Not Recommended for Wilderness	1,245
Inholdings (state, private)	0

¹Appendix I is a detailed description of inholdings included within the area recommended for designation.

3. Criteria Considered in Developing the Wilderness Recommendations

Wilderness Characteristics

A. Naturalness

The Duncan Creek WSA consists of a rolling plateau dissected by about ten miles of deep canyons. Numerous wildlife species including California bighorn sheep, mule deer, sage grouse, mountain quail, raptors and redband trout are found in the area. The WSA is predominantly natural with negligible human imprints. Signs of man are two small livestock water developments, 2.5 miles of primitive vehicle routes (ways) and an abandoned fence.

B. Solitude

Opportunities for solitude are outstanding in most of the WSA because of its large size and excellent vegetative and topographic screening in the canyons and good topographic screening in the rolling hills in the northern portion of the WSA.

The best opportunities for solitude are in the ten-plus miles of canyons where topographic and vegetative screening is excellent. The twisted canyon walls, irregular talus slopes, rock pinnacles and dense riparian vegetation provide an effective visual and auditory barrier between groups. Visual contact is generally not possible within the canyon at distances of more than .25 mile.

Opportunities for solitude are less than outstanding in the southernmost and easternmost portion of the WSA where deep drainages are absent and the surrounding plateau is flat to gently sloping. Solitude in these areas is also affected by regular traffic on the adjacent boundary road.

Low elevation flights by military aircraft occasionally disrupt opportunities for solitude throughout the WSA. The entire southwest corner of Idaho is used for training military pilots in subsonic low elevation flight. Disruptions of solitude are usually brief, although occasionally aircraft can be seen or heard throughout the day.

C. Primitive and Unconfined Recreation

Duncan Creek WSA has outstanding opportunities for primitive recreation because of its ten-plus miles of spectacular canyons, variety of landforms, four miles of perennial streams with good trout fishing and because of frequent opportunities to view pronghorn and mule deer.

The ten-plus miles of spectacular canyons are the principle recreation attraction of the WSA. The 500-foot deep canyons range from broad and open with expansive vistas to narrow grotto-like tributary canyons. Zeno Canyon, in the southern portion of the WSA, with its twisted sheer-walled cliffs and dense riparian vegetation presents an enticing challenge to those seeking wilderness experiences. Near the confluence of Zeno and Duncan Creek canyons, a 60-foot spring-fed waterfall plummets over the canyon rim.

The four miles of perennial streams create a sharp contrast to the barren sagebrush-dominated desert surrounding the canyons. Fishing for redband trout is good. Pronghorn antelope are frequently seen on the plateaus while mule deer are common in the canyons.

Visitors can be expected not only in the canyons but also along the miles of rims where vistas are commonplace. A growing attraction on the plateaus is the near-pristine sagebrush/grasslands. On these rangelands in good ecological condition, perennial grasses have obscured the usually dominant sagebrush. These remnant grasslands are a stark contrast to the sagebrush-dominated plains that now characterize most of the high desert throughout the west.

D. Special Features

The Duncan Creek WSA abounds in exceptionally scenic natural features including the 500-foot deep Duncan Creek; narrow, twisted Zeno Canyon; a 60-foot waterfall; and rolling plateaus dominated by perennial grasses.

The WSA includes four-plus miles of redband trout habitat. This desert-adapted trout is found in southern Idaho, eastern Oregon and northern Nevada and has been classified as a sensitive species.

About 4,500 acres in the WSA have been identified as California bighorn sheep habitat. The Idaho Department of Fish and Game reintroduced this rare species in the adjacent Big Jacks Creek WSA in 1988. Some of these animals are expected to utilize the habitat provided in the Duncan Creek WSA. Bighorns disappeared from this area in the 1920s. Existing California bighorn sheep populations in Owyhee County account for about ten percent of the world's known population. Because of their relative intolerance to the presence of humans, California bighorn sheep are a wildlands or wilderness-dependent species. They are classified as a sensitive species by BLM and the Idaho Department of Fish and Game. This designation was justified due to the relative rarity of these animals.

Diversity in the National Wilderness Preservation System

A. Assessing the Diversity of Natural Systems and Features as Represented by Ecosystems

Wilderness designation of the Duncan Creek WSA would not add a new ecosystem to the National Wilderness Preservation System (NWPS); however, it would add a landform not presently represented in the Sagebrush Steppe Ecosystem. This ecosystem is represented by three designated areas with 76,699 acres. There are 35 other BLM areas in the state under study with this ecosystem. This information is summarized on Table 2.

TABLE 2
Ecosystem Representation

Bailey-Kuchler Classification	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
Dry Domain/Intermountain Sagebrush Province				
	<u>NATIONWIDE</u>			
Sagebrush Steppe Ecosystem	3	76,699	136	4,359,340
	<u>IDAHO</u>			
Sagebrush Steppe Ecosystem	1	12,997	35	949,916
	<u>NEVADA</u>			
Sagebrush Steppe Ecosystem	1	32,407	29	1,273,919
	<u>CALIFORNIA</u>			
Sagebrush Steppe Ecosystem	0	0	5	152,431
	<u>OREGON</u>			
Sagebrush Steppe Ecosystem	0	0	67	1,983,074

**B. Expanding the Opportunities for Solitude or Primitive Recreation
Within a Day's Driving Time (Five Hours) of Major Population Centers**

The Duncan Creek WSA is within a five-hour drive from Boise, Idaho. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population center.

Table 3
**Wilderness Opportunities for Residents
of Major Population Centers**

Population Centers	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
Boise, Idaho	16	4,741,570	141	5,374,250

C. Balancing the Geographic Distribution of Wilderness Areas:

The Duncan Creek WSA would add to the geographical distribution of areas within the NWPS. Regionally, the WSA would add a desert canyon and plateau area not found in designated wilderness and would help to balance opportunities to attain diverse wilderness experiences.

Manageability

By acquiring the 640 acre state inholding, the area can be managed in the long-term to protect and maintain its wilderness characteristics and values. The Idaho State Department of Lands has expressed its willingness to exchange state lands within BLM areas recommended for wilderness designation. The area contains no mining claims or mineral leases. Rough topography and rocky soils would prevent or discourage motorized vehicle use off boundary roads.

Energy and Minerals Resource Values

The U.S. Geological Survey (USGS) and the Bureau of Mines (BM) completed a mineral assessment for 9,400 acres of the Duncan Creek WSA in 1987.

Investigations conducted by the USGS and BM revealed no identified minerals and a low mineral resource potential for metals, oil and gas, and geothermal energy.

No mines, prospects, mineralized areas, patented mining claims or mineral leases were identified in the WSA. Sand, gravel and industrial rock resources are present but sufficient quantities are available elsewhere to satisfy current local needs.

Impacts on Resources

The following comparative impact table summarizes the effects on pertinent resources for all alternatives including designation or nondesignation of the entire area as wilderness.

Table 4

Comparative Summary of the Impacts by Alternative WSA ID-111-7B (DUNCAN CREEK)

ISSUE TOPICS	PROPOSED ACTION	ALL WILDERNESS ALTERNATIVE	NO WILDERNESS/NO ACTION ALTERNATIVE	ALL MANAGEABLE WILDERNESS ALTERNATIVE
Impacts on Wilderness Values	<p>WILDERNESS (8,760 acres) Naturalness and opportunities for solitude/primitive recreation would be maintained on 8,760 acres. The bighorn sheep population would expand and fully occupy available habitat.</p> <p>NONWILDERNESS (1,245 acres) Scientific/ecological values could be diminished on 450 acres of good condition sagebrush steppe rangeland.</p>	<p>WILDERNESS (10,005 acres) Naturalness and opportunities for solitude/primitive recreation enhanced on about 120 acres affected by the closure of primitive vehicle routes. The bighorn sheep population would expand and fully occupy available habitat.</p>	<p>NONWILDERNESS (10,005 acres) Unregulated increases in recreation use could preclude use of up to 13% of the potential habitat for the Big Jacks Creek Complex sheep transplant. The significance of this impact is not known since the sheep have not been reintroduced into this habitat yet and, therefore, critical use areas are not known. The bighorn sheep population would expand and partially occupy available habitat. Scientific/ecological values could be diminished on 450 acres of good condition sagebrush steppe rangeland.</p>	<p>WILDERNESS (9,445 acres) Naturalness and opportunities for solitude/primitive recreation would be enhanced on about 25 acres affected by the closure of primitive vehicle routes. The bighorn sheep populations would expand and fully occupy available habitat.</p> <p>NONWILDERNESS (560 acres) Scientific/ecological values could be diminished on 100 acres of good condition sagebrush steppe rangeland.</p>
Impacts on Recreation Use	<p>WILDERNESS Annual recreation use would be 1,600 visitor days, an increase of 1,225 annual visitor days over current use. Major use areas would be Duncan Creek Canyon with use about 70% hiking and sightseeing and 30% hunting. There would be no significant impact on opportunities to participate in ORV use or hunting.</p> <p>NONWILDERNESS No significant impact.</p>	<p>WILDERNESS Same as the Proposed Action.</p>	<p>NONWILDERNESS Annual recreation use would be 1,245 visitor days, an increase of 1,050 annual visitor days over current use. Major use areas would be Duncan Creek Canyon with use about 65% hiking/sightseeing and 35% hunting. Opportunities to participate in ORV use or hunting would not be affected.</p>	<p>WILDERNESS Same as the Proposed Action.</p> <p>NONWILDERNESS No significant impact.</p>
Impacts on Selected Wildlife Species	<p>WILDERNESS Mule deer would increase up to 2%. Pronghorn would increase up to 2%. Sage grouse would increase up to 5%.</p> <p>NONWILDERNESS Mule deer would increase up to 2%. Pronghorn would increase up to 2%. Sage grouse would increase up to 5%.</p>	<p>WILDERNESS Same as the Proposed Action.</p>	<p>NONWILDERNESS Same as the Proposed Action.</p>	<p>WILDERNESS Same as Proposed Action.</p> <p>NONWILDERNESS Same as Proposed Action.</p>
Impacts on Income and Jobs	<p>WILDERNESS/ NONWILDERNESS There would be \$31,079 of additional income and 2.75 new jobs. Implementation costs would be \$1,700 annually for wilderness management.</p>	<p>WILDERNESS There would be \$30,316 of additional income and 2.75 new jobs. Implementation costs would be \$1,700 annually for wilderness management.</p>	<p>NONWILDERNESS There would be \$27,155 of additional income and 2.4 new jobs. There would be no implementation costs.</p>	<p>WILDERNESS/ NONWILDERNESS There would be \$30,874 of additional income and 2.75 new jobs. Implementation costs would be \$1,700 annually for wilderness management.</p>

Local Social and Economic Considerations

Designation of the entire Duncan Creek WSA or any portion of the WSA as wilderness would have no significant social or economic effects on Owyhee County.

Summary of WSA-Specific Public Comments

Public involvement has occurred throughout the wilderness review process. Certain comments received during the inventory process and early stages of the EIS preparation were used to develop significant study issues and various alternatives for the ultimate management of those lands found to have wilderness values.

During the wilderness inventory for the Duncan Creek roadless unit, 14 commenters supported establishing a WSA and one opposed it. Reasons cited among those who supported establishment of a WSA were the area's outstanding scenery (five comments), abundance of wildlife (four comments), and outstanding backcountry hiking opportunities (three comments). The comment opposed to designation of the area as a WSA cited the lack of outstanding opportunities for solitude or primitive recreation.

During the public review of the Bruneau MFP, 33 out of 37 comments supported wilderness designation. Proponents of wilderness cited the following reasons: ecological values (11 comments), wildlife habitat for sensitive species (two comments), rare plants (two comments), and quality of the area's wilderness characteristics (two comments).

During the public review of the Draft Jacks Creek Wilderness EIS, 151 written and oral comments addressing this WSA were received. Public hearings were held in Boise and Grand View, Idaho. Eighty-four commenters supported wilderness designation for all or portion of the WSA; forty-one commenters supported no wilderness for the WSA; while 26 commenters took no formal position on wilderness designation.

Among those supporting wilderness, 80 percent were Idaho residents, with a majority from Ada County; 12 percent were from other western states; and eight percent were residents of eastern states. By far the most prevalent reason cited for wilderness designation was preservation of wildlife habitat, particularly California bighorn sheep habitat. The second most frequently cited reason for supporting wilderness designation was protection of pristine high desert ecosystems. Other reasons in support of wilderness were to provide primitive recreation opportunities and solitude; to preserve scenic quality; the proximity to Boise, Idaho; and to maximize protection of fisheries and riparian habitat. Twelve wilderness supporters pointed out that wilderness designation would have minimal resource conflicts with other resource uses.

About 85 percent of the comments opposing wilderness designation were from local residents with about 40 percent from Owyhee County, 35 percent from Ada County, and ten percent from Canyon and Elmore Counties. The remaining 15 percent were from residents of other western states. Twenty-two of these commenters believe that wilderness designation would discriminate against senior citizens and the handicapped. Other reasons for opposing wilderness were bighorn sheep do not need wilderness, wilderness is not effective management (too inflexible and costly), wilderness is not multiple use, Idaho has enough wilderness, wilderness values do not need wilderness designation for protection, wilderness would close the door to future oil and gas exploration work.

Several agencies commented on the Draft EIS. The U.S. Fish and Wildlife Service, Department of the Air Force and Idaho Department of Fish and Game supported wilderness designation. The Owyhee County Commissioners opposed designation. The Federal Aviation Agency, Environmental Protection Agency and the Idaho State Historical Society did not express an alternative preference.

APPENDIX I -- DUNCAN CREEK WSA
Estimated Costs of Acquisition of Nonfederal Holdings
Within Areas Recommended for Designation(1)

Legal Description	Total Acreage	Number of Owners	Type of Ownership by Estate	Type of Ownership by Estate	Presently Proposed for Acquisition	Preferred Method of Acquisition	Estimated Cost of Acquisition	Estimated Cost of Acquisition
			Surface Estate	Subsurface Estate			Land Costs (in \$)	Processing Costs (in \$)
Parcel No. 1 T. 10 S., R. 3 E. Sec. 36	640	1	State	State	Yes	Exchange	N/A	3,400
Parcel No. 29(2) T. 10 S., R. 4 E. Sec. 17 (S1/2SW1/4) Sec. 18 (S1/2SE1/4) Sec. 19 (NE1/4, N1/2SE1/4) Sec. 20 (NW1/4, N1/2SW1/4)	640	1	Private	Private	Yes	Exchange	N/A	15,000

(1)The estimated costs listed in this appendix in no way represent a formal appraised value of the land or mineral estate but are rough estimates based on sales or exchanges of lands or mineral estates with similar characteristics to those included in the WSA. The estimates are for purposes of establishing a range of potential costs to the government of acquiring nonfederal holdings and in no way represent an offer to purchase or exchange at the cost estimate included in this appendix.

(2)Outside WSA but adjacent to northern boundary - acquisition through exchange with willing owner would improve accessibility to area recommended for wilderness designation - if acquired, southwestern portion of parcel would be designated as wilderness.